

CLAIMS

1. Soldering paste to be disposed between a solder portion formed on a first electrode and a second electrode when the first electrode with the solder portion is soldered to the second electrode, comprising:

5 liquid basis formed of resin component;

an activator removing oxide film produced on surfaces of the solder portion;

and

metal powder including a core metal and a surface metal to cover surfaces of the core metal,

10 wherein the surface metal has excellent wettability for solder of the solder portion formed on a first electrode, and the core metal is capable of taking the surface metal into itself by dissolving it under heat in a reflow process.

2. The soldering paste of claim 1, wherein the core metal is selected from the group of tin, zinc, lead, and indium, and the surface metal includes any one of gold
15 and silver.

3. The soldering paste of claim 2, wherein the core metal includes tin or tin-based alloy, and the surface metal includes silver.

4. Soldering method for soldering a first electrode with solder portion to a second electrode, comprising the steps of:

20 coating the soldering paste, comprising liquid basis formed of resin component, an activator removing oxide film produced on surfaces of the solder portion, and metal powder including a core metal and a surface metal to cover surfaces of the core metal, on at least one of the solder portion and the second electrode;

disposing the soldering paste between the solder portion and the second
25 electrode by positioning the first electrode and the second electrode;

letting molten solder come in contact with the first electrode and the second electrode by melting the solder under heat and wetting and spreading it along surfaces of the metal powder, and also dissolving the surface metal into the core metal to take it in; and

5 solidifying the molten solder after letting molten solder come in contact with the first electrode and the second electrode.

5. The soldering method of claim 4, wherein the core metal is selected from the group of tin, zinc, lead, and indium, and the surface metal includes any one of gold and silver.

10 6. The soldering method of claim 5, wherein the core metal includes tin or tin-based alloy, and the surface metal includes silver.

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